

1. What are the two forms of quadratics have we studied? Give an example of each.
2. When we substitute 0 for y in a quadratic then solve for x, such a $y = x^2 + 8x + 12$, what are we calculating?
3. If a quadratic is not factorable does that mean it does not have x-intercepts? Explain and give an example/Sketch.
4. Using your calculator, find the vertex, x-intercepts, y-intercept, and two other points on the parabola represented by, $y = 5x^2 - 9x - 1$. Then draw an accurate sketch of the graph.
5. What are the most important values we need to calculate when graphing a parabola/quadratic equation.
6. Put the following equations into graphing form (vertex form), then name the vertex and x-intercepts.
 - a. $y = x^2 + 8x + 1$
 - b. $y = x^2 - 2x + 6$
 - c. $y = x^2 + 4x + 3$
 - d. $y = x^2 - 8x - 1$
 - e. $y = x^2 - 2x - 3$

7. Using your calculator determine the x-intercepts and vertex of the following quadratics.
- a. $y = 2x^2 + 8x - 1$
 - b. $y = x^2 - 3x + 6$
 - c. $y = 3x^2 + 5x + 2$
 - d. $y = x^2 - 9x + 10$
 - e. $y = x^2 - 2x - 6$
8. If you are not allowed to use a calculator what property should you be using to solve for x?
Using the stated property solve the following quadratics.
- a. $0 = 5x^2 - 14x - 3$
 - b. $2x = x^2 + 3$
 - c. $6 = 8x^2 + 13x$